

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently Amended) A catheter system for positioning a stent at a vessel bifurcation, the catheter system comprising:

a catheter including a proximal end and a distal end, the catheter comprising:

a first tubular member including a proximal end and a distal end, the first tubular member defining an inflation lumen of the catheter and extending distally from the proximal end of the catheter;

a second tubular member defining channel having a main guidewire lumen extending proximally from a distal end of the second tubular member to a proximal end of the second tubular member, wherein the distal end of the second tubular member is a distal end of the catheter and the proximal end of the second tubular member defines of said catheter to a main guidewire exit port, said main exit port located at a first distance from said distal end, wherein [[said]] the main guidewire lumen is configured to receive a main vessel guidewire therethrough, wherein the second tubular member is at least partially disposed within the inflation lumen of the first tubular member; [[and]]

a balloon including a proximal waist coupled to the first tubular member adjacent to the distal end of the first tubular member and a distal waist coupled to the second tubular member adjacent to the distal end of the second tubular member;

a branch guidewire enclosure positioned alongside said channel the first tubular member, wherein [[said]] the branch guidewire enclosure defines a lumen [[is]] configured to receive a branch vessel guidewire therethrough, a proximal end of the branch guidewire enclosure defining a branch guidewire exit port; and

a stent having a lumen and a side opening in a wall thereof, [[said]] the stent positioned on a distal portion of said channel about at least a portion of the balloon, and wherein a distal portion of [[said]] the branch guidewire enclosure is positioned through [[said]] the lumen of the stent and exits exiting at [[said]] the side opening[[.]];

wherein said branch guidewire enclosure extending proximally from said side opening of said stent to a branch exit port, said branch exit port located at a second distance from said distal

~~end of said catheter system, [[said]] the branch guidewire enclosure is bonded to [[said]] the first tubular member channel only at [[said]] the branch exit port, said first distance and said second distance being substantially equal, wherein the main guidewire exit port and the branch guidewire exit port are located proximal of the stent and distal of the proximal end of the catheter said first distance and said second distance are less than a distance from said distal end of said catheter system to a proximal end of said catheter system and greater than a distance from said distal end of said catheter system to said proximal end of said stent.~~

2-3. (Canceled)

4. (Original) The catheter system of claim 1, further comprising a bond portion coupling the first tubular member, second tubular member, and branch guidewire enclosure ~~connecting said main exit port and said branch exit port to a proximal tube, said proximal tube extending proximally from said bond portion to the proximal end of said catheter system.~~

5. (Currently Amended) The catheter system of claim 1, wherein the main guidewire exit port is positioned ~~said first distance~~ is between 10 and 50 centimeters from the distal end of the catheter.

6-7. (Canceled)

8. (Currently Amended) The catheter system of claim 1, wherein the branch guidewire exit port is positioned ~~said second distance~~ is between 50 and 150 centimeters from the distal end of the catheter.

9-27. (Canceled)

28. (Currently Amended) A catheter comprising:
a proximal tube extending from a proximal end to a distal end;
a first distal tube having a proximal open end, the first distal tube being configured to receive a first guidewire;

a second distal tube having a proximal open end, the second distal tube being configured to receive a second guidewire; and

a bond having a proximal end and a distal end, the proximal end of the bond coupled to ~~connecting to the proximal tube at~~ the distal end of the proximal tube, the distal end of the bond coupled ~~connecting to~~ the first distal tube adjacent to the proximal open end such that ~~that~~ the proximal open end of the first distal tube remains open to define a first guidewire exit port, and the distal end of the bond coupled ~~connecting to~~ the second distal tube adjacent to ~~that~~ the proximal open end such that the proximal open end of the second distal tube remains open to define a second guidewire exit port, ~~wherein the second distal tube is detached from the first distal tube outside of the bond.~~

29. (Previously Presented) The catheter of claim 28, wherein the first and second guidewires are configured to exit the catheter at the proximal open ends of the first and second distal tubes.

30. (Previously Presented) The catheter of claim 28, wherein the first guidewire and the second guidewire are each less than 50 centimeters in length.

31. (Previously Presented) The catheter of claim 28, further comprising:
a balloon disposed on the first distal tube, which defines an inflation lumen that is in communication with the balloon for inflation thereof; and
a stent positioned on the balloon, wherein the second guidewire is configured to exit through a side opening in the stent.

32. (New) The catheter of claim 28 wherein the second distal tube is detached from the first distal tube outside of the bond.

33. (New) The catheter of claim 31, wherein the second distal tube does not include a balloon.